

Self-Lubricating Hard Coatings for Extreme Environment, Phase I

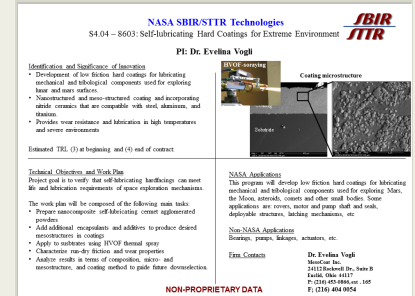
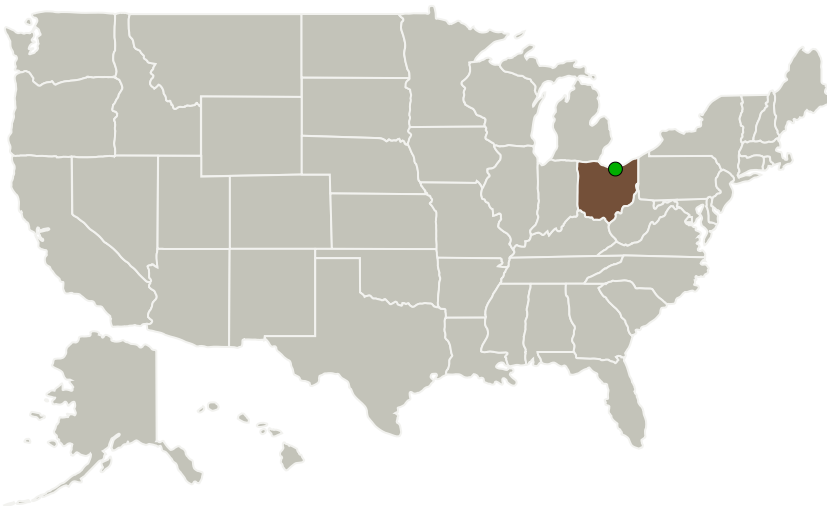
Completed Technology Project (2014 - 2014)



Project Introduction

This program will develop low friction hard coatings for lubricating mechanical and tribological components used for exploring Mars, the Moon, asteroids, comets and other small bodies. This proposed SBIR program will build on MesoCoat's extensive prior experience in developing dense, hard friction-free coatings.

Primary U.S. Work Locations and Key Partners



Self-lubricating Hard Coatings for Extreme Environment Project Image

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Organizations Performing Work	Role	Type	Location
MesoCoat, Inc.	Lead Organization	Industry	Euclid, Ohio
● Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio

Primary U.S. Work Locations

Ohio

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Project Transitions

June 2014: Project Start

December 2014: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/137506>)

Images



Project Image

Self-lubricating Hard Coatings for Extreme Environment Project

Image

(<https://techport.nasa.gov/image/129358>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

MesoCoat, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

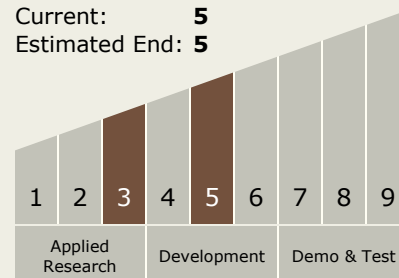
Carlos Torrez

Principal Investigator:

Evelina Vogli

Technology Maturity (TRL)

Start: **3**
Current: **5**
Estimated End: **5**



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Technology Areas

Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
 - └ TX12.1 Materials
 - └ TX12.1.5 Coatings

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System